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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,813	11/21/2003	Yves Termonia	CL2120USNA	3356

23906 7590 07/12/2005

E I DU PONT DE NEMOURS AND COMPANY  
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BARLEY MILL PLAZA 25/1128  
4417 LANCASTER PIKE  
WILMINGTON, DE 19805

EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/719,813

Applicant(s)

TERMONIA ET AL.

Examiner

Andrew T. Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4, 5, 9 and 12-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/7/04 & 2/17/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1-3, 6-8 and 10-11 (Group I, Species 1 from Species Group 1, and Species 1 from Species Group 2), in the reply filed on 6/29/2005, is acknowledged. Claims 4-5, 9 and 12-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b).

### ***Specification***

2. The disclosure is objected to because of the following informality: The use of trademarks has been noted in this application (for example, see page 1, line 11 and page 11, lines 1-2). Each letter of the trademark should be capitalized wherever it appears and be accompanied by the generic terminology. Appropriate correction is required.

3. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 6-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 11-158733 to Aranaga et al. (hereinafter referred to as Aranaga) in view of USPN 4,038,452 to Kobayashi et al. (hereinafter referred to as Kobayashi).

Regarding claim 1-3, 6-8 and 10-11, Aranaga discloses a non-woven fabric comprising a plurality of entangled helically crimped asymmetric bicomponent fibers comprising a first crystallizable polyester component (poly(ethylene terephthalate) and a second crystallizable polyester component (poly(propylene terephthalate)), said first crystallizable polyester component exhibiting a lower rate of crystallization than said second crystallizable polyester component, said fibers being characterized by a denier range of 0.5 to 6 denier (see entire document including Patent Abstract and claim 2).

Aranaga is silent with regards to the orientation of the fibers, the number of crimps per inch, the crimp radius of curvature, and the bulk density of the nonwoven fabric, therefore, it would have been necessary and thus obvious to look to the prior art for the conventional orientation of fibers, number of crimps per inch, crimp radius of curvature, and nonwoven fabric bulk density. Kobayashi provides this conventional teaching showing that it is known in the nonwoven crimp fiber art (column 1, lines 4-11) to orient the fibers in a well-defined plane (see Figure 1), to use fibers with 20 to 80 crimps per inch (column 2, lines 45-61), to use a radius of curvature of below 1.5 mm (column 2, line 45 through column 3, line 5), and to use a bulk density of between 0.05 to 0.25 g/cm<sup>3</sup> (column 2, lines 9-19 and column 8, lines 35-38). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to orient the fibers of Aranaga in a well-defined plane, to use fibers with 20 to 80 crimps per inch (column 2, lines 45-61), to use a radius of curvature of below 1.5 mm (column 2, line 45 through column 3, line 5), and to use a bulk density of between 0.05 to 0.25 g/cm<sup>3</sup>, motivated by the expectation of successfully practicing the invention of Aranaga.

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Regarding claim 2 and 11, Aranaga discloses that the fibers may be side-by-side fibers (Patent Abstract).

Regarding claims 3, 7-8 and 11, Aranaga discloses that the first crystallizable polyester component may be (poly(ethylene terephthalate) and that the second crystallizable polyester component may be (poly(propylene terephthalate) (Patent Abstract).

Regarding claims 6-8 and 11, Aranaga discloses that the fibers may be staple fibers (Patent Abstract).

Regarding claims 7-8 and 11, Aranaga discloses that the concentration ratio may be in the range of 70:30 to 30:70 (Patent Abstract). Aranaga specifically mentions a concentration ratio in the range of 60:40 to 40:60 (see Detailed Description).

Regarding claims 10 and 11, Aranaga does not specifically mention the Young's modulus or the ultimate stretch, but considering that the nonwoven fabric taught by the applied prior art is substantially identical to the claimed nonwoven (same side-by-side bicomponent fibers, same fiber density, same number of crimps per inch, same crimp radius of curvature, and same bulk density), it appears that the nonwoven fabric inherently possesses the claimed Young's modulus and ultimate stretch.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to

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obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

Regarding claim 11, Aranaga discloses that the fibers may have an uncrimped length in the range of 2 to 100 mm (Patent Abstract).

### ***Conclusion***

6. The following patents are cited to further show the state of the art with respect to a high bulk density nonwoven fabrics:

USPN 3,839,139 to Ito et al.

(see entire document including column 4, lines 9-19 and the Examples)

USPN 4,950,529 to Ikeda et al.

(see entire document including column 4, lines 45-58)

7. The following patent is cited to further show the state of the art with respect to crimping restrained fibers:

USPN 5,302,443 to Manning et al.

(see entire document including column 1, lines 17-50)

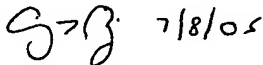
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

 7/8/05  
**ANDREW T. PIZIALI**  
**PATENT EXAMINER**